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Nota

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Predation of *Pseudis minuta* Günther 1858, by *Lethocerus annulipes* (Heteroptera: Belostomatidae)

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Aquatic invertebrates are common predators of anuran amphibians in different stages of their life cycle (Toledo, 2005). Although these predators consume mainly amphibian eggs and larvae (Wells, 2007), post-metamorphic anurans may also be preyed for instance when breeding take place in the aquatic environment (Toledo, 2005).

The aim of the present work is to communicate a case of predation on an adult specimen of *Pseudis minuta* (Amphibia, Anura, Hylidae) by an aquatic water bug of the genus *Lethocerus* (Insecta: Heteroptera: Belostomatidae). Observations were made on May 27, 2012, 12: 40 am, at Aceguá, Departamento de Cerro Largo, in NE Uruguay (31°54'58"S; 54°07'59"W).

We observed an adult male of *P. minuta* (28.5 mm snout-vent length), which was captured by a water bug of the species *Lethocerus annulipes* (57.3 mm total length) at the shoreline of a lentic water body (Fig. 1). The insect immobilized its prey with the mandibular apparatus, holding the frog by its right hind leg. The prey was immobilized for about 10 min until specimens were collected, during which the frog neither attempted to escape nor vocalized.

The pond was elliptical (ca. 27x14.5 m) and presented less than 1.5 m depth; water temperature was 20.4°C, pH 9,0 and conductivity 161.8 µS/cm. Approximately 30% of the pond surface presented aquatic emerging vegetation, mainly floating plants. Other amphibian species found at this site were *Leptodactylus latrans*, *L. latinasus*, *Dendropsophus minutus*, *D. sanborni*, *Phyllomedusa iheringii*, *Scinax squalirostris*, *S. uruguayus*, *S. granulatus*, *Pseudopaludicola falcipes*, *Odontophrynus americanus*. Both mentioned specimens were accessioned in the herpetological and entomological (E) collections of Museo Nacional de Historia Natural de Montevideo (MNHN), MNHN 09465 and MNHN-E 1166 respectively.

There are several reports on *Lethocerus sp*. as predators of Neotropical anurans (i.e. Figuereido-de-Andrade *et al.*, 2010; Haddad and Bastos, 1997; Zaracho, 2012). Toledo (2005) indicates that 25% of published reports on anuran predation by aquatic invertebrates correspond to water-bugs (Belostomatidae). The populational effects of predation on adult anurans by these aquatic insects deserve further studies, as they may be relevant for many amphibians that use ponds as breeding sites. This predation pressure would be even greater for aquatic amphibians like *Pseudis minuta*, because their habits may increase the encounter probability with this kind of predators.

Figure 1. Predation of adult *Pseudis minuta* by *Lethocerus annulipes*.

Literature cited

Figueiredo-de-Andrade, C.A.; Santana, D.J. & Potsch de Carvalho-e-Silva, S. 2010. Predation on *Scinax x-signatus* (Anura: Hylidae) by the giant water bug *Lethocerus annulipes* (Hemiptera: Belostomatidae) in a Brazilian Restinga habitat. *Herpetology Notes* 3: 53-54.

Haddad, C.F.B. & Bastos R.P. 1997. Predation on the toad *Bufo crucifer* during reproduction (Anura, Bufonidae). *Amphibia-Reptilia* 18: 295-298.

Toledo, L.F. 2005. Predation of juvenile and adult anurans by invertebrates: Current knowledge and perspectives. *Herpetological Review* 36: 395-400.

Wells, K.D. 2007. The Ecology and Behavior of Amphibians. The University of Chicago Press, Chicago.

Zaracho, V.H. 2012. Predation on *Elachistocleis bicolor* (Anura: Microhylidae) by *Lethocerus annulipes* (Heteroptera: Belostomatidae). *Herpetology Notes* 5: 227-228.

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